<u>Third National Research Symposium on Limited English Proficient Student Issues:</u>

Focus on Middle and High School Issues

The Home Environment of Gifted Puerto Rican Children: Family Factors Which Support High Achievement

Candis Yimoyines Hine
National Research Center of the Gifted and Talented

This paper is based on research that was supported under the Javits Act Program (Grant No. R206R00001) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings do not reflect the position or policies of the Office of Educational Research and Improvement or the U.S. Department of Education.

Abstract

Hispanic Americans, the fastest growing student population in the United States, may be the most undereducated group in America. Of concern to educators are indications that Hispanics have the highest dropout rate, are overrepresented in remedial programs, and are poorly represented in gifted programs.

The purpose of this study was to examine the perceptions of ten gifted Puerto Rican students and their parents to identify family factors which may contribute to high achievement. The methodology used was qualitative and phenomenological. Data were collected through written questionnaires and in-depth interviews, and inductive analysis was used to uncover eight common factors that supported students' academic achievement. Four additional factors described by individual subjects were identified as variant themes. Explanations of the roles the factors played in supporting high academic achievement were also derived from the data.

Introduction

Recent research (Davis, Haub, and Willette, 1983; Diaz, 1984; Hodgkinson, 1985) has shown that Hispanic Americans are the fastest growing student population in the United States. Demographic studies confirm that the American Hispanic population increased by 61 percent from 1960 to 1980 while the general population grew only by 11 percent (Hodgkinson, 1985). Furthermore, Hispanics are a relatively youthful population. While the U.S. child bearing rate remains at a low level of 1.8 children per female, the continuing youthful immigration of Hispanics coupled with a fertility rate of 2.5 children per female "guarantees larger cohorts of children for some time to come" (Davis, Haub, and Willette, 1983). These trends will have a great impact on the composition of America's school-age population into the twenty-first

century.

What makes these statistics a particular source of concern to educators are indications that Hispanics may be the most undereducated group in America (Ascher, 1984; Hyland, 1989). Goldenberg (1987) states:

By any indicator, academic under achievement among large segments of the U.S. Hispanic population is profound, persistent, and seemingly entrenched. Hispanic students score lower than do their white, middle-class counterparts on tests of academic achievement. They are more likely to fail one or more grades in school, be placed in special education, and drop out altogether. Attitudes toward school are more negative, with Hispanic students reporting a higher degree of alienation with school and school personnel. (p. 149)

Many contemporary theorists (Armor, 1972; Bradley and Caldwell, 1984; Clark, 1983; Coleman, 1975, 1990; Comer, 1988; Halsey, 1972; Laosa, 1982; Marjoribanks, 1979, 1987; Midwinter, 1977; Smith, 1972; Walberg, 1984) believe that the family environment has a significant effect on the child's educational development; in order to reduce differences in achievement, programs must address not only the child's inherent abilities (trait theory) but also his family environment (situation theory).

Coleman states:

Perhaps the most pervasive research result of recent research in educational achievement, from that of *Equality of educational opportunity* (1966) onwards. . . is the strength of effect of family differences in creating achievement differences among children, compared to the relative weakness of effect of school differences. (p. 63)

Although much research has been done to determine how the family environment affects achievement, few researchers have directly studied minority populations.

In industrial societies such as the United States, children with highly developed verbal and mathematical skills are generally rewarded favorably in school and later in the workplace. Furthermore, in our society, the white middle and upper classes possess greater means of creating family learning environments that are strongly related to the acquisition of achievement skills in children (Marjoribanks, 1979, 1987; Karabel and Halsey, 1977). In describing twentieth century American education, Martinez (1985) states, "The school curricula and cultural atmosphere became exclusively representative of majority white, Anglo-Saxon, English-speaking, middle-class values. . . continuities between the expectations, language, learning styles, and cultural values embedded in the home, school, and society of the ruling majority assure the success of the individual" (p. 144).

In his research, Marjoribanks (1979) sought to discover the ideal typical definition of an academically oriented family. Because of their situation in the power structure of the society, such families would be capable of creating a social-psychological learning environment that was closely related to their children's successful academic achievement.

Marjoribanks examined in detail a number of studies (e.g., Dave, 1963; Dyer, 1967; Keeves, 1972; Kellaghan, 1977; Levine, et al, 1972; Marjoribanks, 1972, 1974; Mosychuk, 1969; Trotman, 1977, 1978; and Wolf, 1964) which identified a set of social-psychological family environment variables that have moderate to high concurrent validity in relation to academic achievement. From these studies, Marjoribanks extracted five environmental dimensions (which he called "presses") that have strong associations with

children's achievement in order to develop a framework for his definition of an "academically oriented family." These dimensions are (1) strong achievement orientation, (2) strong press for English, (3) strong press for independence, (4) individualistic rather than collectivistic achievement value orientation, and (5) high educational and occupational aspirations for children. Marjoribanks then developed his "Family Environment Schedule" (FES) to assess the dimensions of the academically oriented family among different groups. The FES is a semi-structured interview schedule which provides a raw score for each of the five presses. This instrument has been used by Marjoribanks and other researchers with various cultural groups and has proved to be a reliable instrument (Soto, 1988). In the field of gifted education, Albert and Runco (1986) found highly significant correlations between the Marjoribanks presses and both IQ and achievement test scores in their longitudinal study of exceptionally gifted boys and their families.

Soto (1988) used a revised format of the Marjoribanks Family Environment Schedule to examine the home environment of higher and lower achieving Puerto Rican children. For her investigation, Soto interviewed the mothers of 28 higher achieving and 29 lower achieving fifth and sixth grade children in an urban area of east central Pennsylvania to obtain Marjoribanks' FES scores. Statistically significant differences were obtained between the two achievement groups for press for achievement, concern for use of language, and parental reinforcement of aspirations. There were, however, no significant differences with respect to press for independence and individualistic-collectivistic achievement value orientations. Soto states that this discrepancy lends support to the claim that the Puerto Rican home environment has unique cultural components. She states,

... the Puerto Rican family values a nurturing environment for its children and has established an 'enmeshed' pattern of interactions, encouraging dependence and discouraging values that appear to be self-centered in nature regardless of other home variables that seem to influence academic performance. (1988, p. 165).

The long term observations and studies of Nine-Curt (1990) at the University of Puerto Rico lend support to Soto's findings. Nine-Curt writes extensively of cultural reversals between the Anglo and Puerto Rican family value systems. In her *Contrastive analysis of cultural values between Puerto Ricans and Anglos* she compares the Anglo value of "competition" with the Puerto Rican "supportive" demeanor, Anglo "individualism" with Puerto Rican "affiliation to family," and Anglo "self-motivation" to Puerto Rican "family motivation."

The little research that exists regarding Hispanic achievement further suggests that the family achievement values which historically have been displayed by academically successful members of the majority population may not necessarily be the same values held by Puerto Rican families. For example, while Marjoribanks cites "press for English" as an important contributor to academic success in our Western culture, Fernandez and Nielsen (1986) discovered that Hispanic parents who encourage and support their children's proficiency in *both* English and Spanish may actually be enhancing their children's achievement. In a study of high school sophomores and seniors including Hispanic bilinguals, Hispanic English monolinguals, white bilinguals, and white English monolinguals Fernandez and Nielsen (1986) found that exposure to a second language during upbringing may, in fact, be a scholastic asset. Bilingualism was associated with superior performance on both verbal and nonverbal tests. "The achievement bonus due to bilingualism for Hispanics is roughly twice that for whites even though bilinguals are socioeconomically disadvantaged compared to [English] monolinguals among Hispanics. . . " (p. 53).

In this study, a field test involving two academically successful Puerto Rican college students was used to pilot a group of family environment questions which were based on the work of Marjoribanks and revised

according to the current review of the literature. The goal was to determine if questions developed by the researcher for a questionnaire and interview guide would be appropriate for the targeted population.

The two students chosen for the pilot study are 1990 graduates of a large high school in the Hartford, Connecticut, metropolitan area. The students were recommended for this study by the high school ESL (English as a second language) program teacher on the basis of grades and academic honors received in high school.

The pilot yielded three very interesting and relevant pieces of information. First, both students came from homes where the mother, in particular, stressed the importance of academic achievement and had high expectations for the child's success in school and later in the workplace. In fact, one mother served as a role model for her child; the mother was enrolled in college classes so she could get a better job and be a better source of support for her family. Second, as in the Fernandez and Nielsen study, proficiency in both English and Spanish was a scholastic asset for both students. And third, in agreement with Soto's findings, both subjects were expected to be loyal to the family; one subject stated that "people here just don't understand the family bond." Although both female students were described as "equally capable" by their teacher, one subject was accepted and enrolled in the engineering program at a state university, while the other chose to stay home and take courses at a local community college so she could help her parents support and care for a very large family of brothers and sisters.

Several researchers (Clark, 1983; Marjoribanks, 1987; Soto, 1986) have suggested that it is important for educators to understand the adaptive strategies employed by families outside of the mainstream culture. Soto feels that by understanding the positive aspects of the higher achieving Puerto Rican students, educators will be better able to guide parents, teachers, and researchers in providing optimal learning experiences for Hispanic children.

The purpose of the present study was to examine the perceptions of gifted Puerto Rican high school students and their parents in order to identify family factors which may contribute to high achievement. The goal was to provide baseline information about the family learning environment of gifted Puerto Rican students which could be compared to existing theoretical assumptions about families of high achieving students. Information concerning home background of high achieving Puerto Rican students could be helpful in providing strategies for parents about ways to promote their children's academic growth. At the same time, these findings may help educators understand and support successful home environment strategies.

Research Methods and Procedures

Sampling Techniques

Due to the investigative nature of this study, purposeful sampling was employed. In purposeful sampling, particular subjects are included in the study because they are believed to facilitate the development of theory (Bogden and Biklen, 1982).

The subjects for this study were ten Puerto Rican high school students. The small number of subjects enabled the researcher to concentrate on depth and richness of data.

Students chosen for participation in this study had to meet the following criteria:

- 1. The student is of Puerto Rican descent.
- 2. The student is presently between the ages of 14 and 19.
- 3. The student is enrolled in a gifted program and/or presently achieving at a superior level academically as evidenced by grades, teacher observation, awards, and honors.

School personnel who work closest with Puerto Rican students and would be best able to evaluate the students' capabilities and appropriateness for candidacy in the study were sent information explaining the research and the criteria for selection. Those contacted included directors of gifted education, directors of bilingual education, and high school guidance counselors in four urban and four suburban school districts.

As a result of the request for subjects, twelve Puerto Rican high school students were suggested for participation in the study. Because of time constraints, two potential subjects chose not to participate and final nominations were completed for ten students. This sample included five males and five females from two suburban and two urban high schools in Connecticut. Students were 15 to 18 years of age, came from one and two parent homes, and represented a broad range of socioeconomic levels (see Tables 1 and 2). It is significant to note that so few students were nominated considering that three of the eight high schools that were originally contacted had populations that were over 50 percent Puerto Rican. The researcher found that, in general, Puerto Rican children are not being identified by school systems as "high achievers" or "gifted."

Sampling was terminated once data were collected for this group of students and parents because of "informational redundancy" (Lincoln and Guba, 1985). Very strong patterns and trends were apparent across subjects and no new information was forthcoming.

Data Collection and Analysis

Phase One: Orientation and Interview

The initial data collection step was carried out in an open-ended way. Once a student and his/her parents agreed to participate in the study, they were sent a packet which contained parent and student questionnaires. The first section of each questionnaire requested specific biographical information about the subject and his/her family. The second section contained open-ended exploratory questions such as: "What events and/or persons have had the greatest positive influence on your performance as a student? How did these events or persons enable you to be a better student?" (Student questionnaire no. 5); or "What factors do you believe motivate your child to do well academically?" (Parent questionnaire no. 2) Lincoln and Guba explain, "The object of this first phase is to obtain sufficient information to get some handle on what is important enough to follow up in detail" (p 235).

In reviewing the respondents answers to these open ended questions, the researcher "unitized" specific pieces of information and began to formulate categories. At this point, provisional insights and hypotheses were formed, and five general themes were identified. They were: (1) press for achievement; (2) press for language development; (3) high educational and occupational aspirations; (4) family support system; and (5) family bond. Similar to Marjoribanks' findings, subjects described a strong "press for achievement" and families had "high educational and occupational aspirations"; the present researcher, however, chose the term "press for language development" rather than Marjoribanks' "press for English" because students were

being encouraged to develop language skills in *both* English and Spanish. The theme "family support system" was based on student and parent responses describing behavior such as parental involvement and interest in home activities, parental monitoring of children's use of time and space, parental explanation and advisement, and parental role behavior. These characteristics of the home environment are reminiscent of Clark's (1983) "sponsored independence" style (defined in his study of high achieving black students.) Family loyalty and close knit family ties were also evident in the questionnaire data (theme five - "family bond"). Finally, more structured questions were written for these themes based on the subjects' responses and the literature review of previous findings. In addition, individual statements were noted and explored further in the in-depth interviews.

Phase Two: Focused Exploration

In phase two of the study, the researcher went to the school or home of each student to conduct in-depth interviews at a time and location that was most convenient and comfortable for the respondents. Interview sessions were one to two and a half hours in length. The length and number of interviews were determined by the point at which data saturation was attained. In addition, the researcher visited the high school guidance departments and examined cumulative record files of all students.

As data collection was completed for each subject, the information was analyzed to reveal individual perceptual themes. By collecting questionnaire data (phase one), and conducting interviews with students and parents, speaking to guidance counselors who nominated the students, and reviewing school records (phase two), cross-validation was achieved by "between-methods" triangulation (Guba, 1978).

Phase Three: Member Check

During data collection, all interviews were tape-recorded for transcription. Copies of the transcriptions were sent to the participants for review and correction and/or amendment, if necessary.

In the final stage of data analysis, the researcher categorized perceptual themes revealed by each subject in order to identify themes all subjects held in common. The final data analysis provided further evidence supporting the five initial themes; in addition, three new common themes emerged through the interview process. These shared themes were examined further to identify their relationship to the literature on family factors which support high achievement. Four additional factors peripheral to the family learning environment were identified by individual subjects and are described as variant themes.

Results and Discussion

The results are presented in two sections corresponding to the first two research questions. Section one identifies themes or factors the students and parents commonly perceived as supporting high academic achievement. Section two presents the students' and parents' descriptions of the role each factor played in supporting high achievement.

Research Question No. 1

What factors within the family environment do gifted Puerto Rican students and their parents perceive as supporting high academic achievement?

Categorization of data in the three phases of data collection enabled the researcher to identify eight common factors which Puerto Rican students and parents believed contributed significantly to high academic achievement. These eight factors are: (1) press for achievement; (2) press for language development; (3) high educational and occupational aspirations; (4) strong family support system; (5) family bond; (6) optimistic outlook/lack of defeatism; (7) discomfort with cultural stereotypes/reaction to teacher and community expectations; and (8) school and extracurricular involvement/"social bonding."

Research Question No. 2

What role have these factors played in supporting high academic achievement?

Factor 1: Press for Achievement

Students and parents described behavior which suggested a strong press for achievement. Parents were: (1) concerned with their child's progress in school, and watched report cards and encouraged greater effort when they felt their child might not be working up to his/her potential; (2) offered help in completing difficult homework assignments or guided the student in finding appropriate help from others; (3) helped the child to establish realistic academic goals; (4) praised the child for his/her abilities and outstanding achievement; (5) monitored student time spent on homework, especially during elementary school, and helped establish good study skills; and (6) showed interest in topics being studied in school.

The following sample passages from students (S) and parents (P) illustrate Factor 1:

My house, where the rules are: Nothing you like will be done until schoolwork is done. Completely true. I think about it and understand it. If I want to be a mathematician, how would I be one if I don't do math? That rule I've been following for years and it works. (S)

That's the first thing I say to my kids. Do your homework and then you see TV or whatever you want. The first, before you get too tired, do your homework. (P)

When I was younger, my parents used to monitor my time spent on homework and make sure I did it. Now my mom doesn't have to tell me to do my work. She knows I will get it done on my own. . . if I didn't [get it done] I know she would be watching. (S)

She always loved school and we never had to force her to do her homework. We were there to help her if she needed it... We did watch her report cards and praised her hard work. (P)

As soon as I got home, they would ask, "What did you learn today? Have you done your work? Do you need to get started right now?" When I was little, they would check to see if I did it. But now they don't do that anymore. (S)

My family has always helped me because when I was young they bought me books and used to help me find information about the things I was interested in. By the time I went to preschool, I knew all my ABCs and could count to 100. Ever since then I've always been good and people have always let me know I was doing good. (S)

Factor 2: Press for Language Development

Parents in the study (1) read or sang to their children when they were little, (2) encouraged their children to read and discussed what was being read by members of the family, (3) showed concern for the correct usage of both Spanish and English, and (4) encouraged their children to maintain Spanish proficiency while learning English.

The following sample passages provide evidence of Factor 2:

Well, when they were little I always encourage them to read. They have a program in school, "Books Beyond," and they read books and they give them books to take home, and medals, and everything. And I always encourage them to read. (P)

Ever since she was a baby, "Elena" loved to ask questions. She always wanted to know about everything. I always read to her and talked to her. I brought her books and tried to answer her questions. (P)

She was always curious since she was born. When she was little, I used to sing in the choir in the church. She would ask me to get the book. And she was about three and a half or four years old, and she came to me with the choir book with the songs. "Mom, I want you to sing to me." And what I noticed in her was how she did imitations of the words and then say, "That's the one. I like that one." And I started discovering that was good to teach her. (P)

Lysette [an older sister] and my father helped me a lot. By Cynthia [the youngest child] we learned that maybe we should get her started right away on the English. I remember many nights staying up and having my father and Lysette help me with reading and with words. (S)

They were very particular about the way I speak Spanish. Sometimes when you get lazy, you say a verb and it might be in the wrong tense. And I'm like, "Oh, whatever." And they're [parents] like, "No, you can't say it that way." (S)

We have those that come to the States, and they only learn English, and they start speaking English at home. And they don't remember Spanish. I don't think that's good. I think that closes more doors than it opens because when they're older it's harder to learn a second language. It's easier to learn a second language when they're younger. (P)

When I was little, she [mother] used to take me to the library a lot. We'd spend a lot of time there, and she'd help me find some books about the things I was interested in learning about. (S)

Factor 3: High Educational and Occupational Aspirations

Parents of high achievers had high educational and occupational aspirations for their children, and stressed the importance of getting a good education to reach these goals. They often mentioned their own employment situation and personal aspirations which served as a role model for their children.

The following sample testimonies provide evidence for Factor 3:

I was telling Juan this morning that I wasn't dumb in high school. But, the thing is, I got married so young. I was sixteen. His father, that was my first husband, didn't let me take the

college exams. What they call here the SATs. And I was so depressed because of that. . . I want to go to college because I had the brains to go to college. . . So I'm so proud of them because they're making it. Right now my oldest is studying finance, and the other one is going to study nursing. (P)

My mom plays the biggest role in my achievement in school. She married my father when she was a junior in high school. Due to his influence, she couldn't go to college. She told me that and said, "Don't commit the same mistake that I did. Finish high school, then go and finish college. After that, then get married and make a life." These words I'll remember today, tomorrow, and always. (S)

... since I was a little girl, I wanted to be a teacher. My mom was happy about that because she wanted to be a teacher. She will be very proud if I become a teacher. (S)

That's what I say to "Maria." I don't want to see you in a factory working hard, killing yourself, working for some others. And you're never going to use your potential. And she said, "Ma, I'm not going to be a factory worker." She always say that. We always say, "You have our support. We sacrifice ourselves and whatever we have to do, we'll do it." I'm always proud of her. I will be proud of her to see she's a doctor. (P)

I saw where they lived [in Puerto Rico] and I saw where my grandparents are living now, where my father grew up. I sound like I'm bragging and I don't really want to, but I see my parents and my mother tells me how she had to leave school in third grade to come home and cook, to work in the fields, to wash clothes. It just makes me happy that I don't have to put up with that. And I'm thankful for that. But I don't say it enough. I have to thank God for the solid family I have. My parents have been great role models. (S)

I have always tried to give "Cynthia" everything that she needs. I've always made sure that she does good in school because I want her to be successful in life and not do what I did, which was drop out of school in the ninth grade because without an education you can't get far in life. (P)

Factor 4: Strong Family Support System

The families of high achieving students provided a strong family support system for their children. Aspects of this support system described by parents and students included: (1) informal conversations of everyday events; (2) family decision-making policies; (3) monitoring and supervising of free time; (4) parental explanation and advisement; and (5) help in establishing and reaching long-term goals. Some selected statements that support this factor include:

If anything happens to them [my children], come to me, not to anyone in the street. You know, they're having a problem, tell me what's happening. You know that's the way I treated them. You don't learn unless you make mistakes along the way. (P)

I would tell them [other parents] to believe in your children. Always be there to support them and help them feel good about themselves. Let them know you will help them be the best that they can be. (P)

My parents always want me to do my best but they never really pressure me into doing things that I don't want to. They always back me up in most of the decisions I make and that helps me when I have people on my side instead of yelling at me. They have given me a lot of support and I think that helped me a lot. By them not pressuring me, it helps me to relax and I perform better. (S)

Sometimes I tell "Maria," "Do you think you can do better?" And she says, "Of course, Mom. I'm a very smart person." And I say, "Okay, you will. Go on." She has very good confidence. "But don't go over the line." I always tell her that. Sometimes if you go over, you will be disappointed. (P)

My mother always gives me good advice. And I'm like an advice column at school. They come to me with their problems and sometimes I'll come back and ask her opinion. "What do you think this girl should do?" She'll give me her advice and I've learned. It has helped me a lot because she's given me her moral support and she's always there. (S)

"Marcos" is a very open young man and I think that is good. He's got to make the ultimate choice. It's his life and he's got to do it. I don't think that as a parent you should just abandon the child when he is six or seven and let him have his own key and do what he wants. I don't believe in that. But Marcos is a very responsible young man and, according to his abilities, he gets his responsibilities. He has his obligations, too. (P)

As long as I get everything done. As long as I have my chores done, my homework. Everything that's supposed to be done is done. Then I can go where I want as long as I'm not home too late. (S)

Factor 5: Family Bond

This factor includes a sense of loyalty to family and culture, family pride and motivation, and closeness of family ties. The parents in this study were teaching their children about the Spanish language and their Puerto Rican heritage while they strove to become successful in the larger culture; both parents and students felt it was important to understand and feel positive about one's heritage in order to develop a strong sense of self. The parents offered emotional and financial support to both their immediate and extended families and were willing to make sacrifices now to prepare for a better future. They took a great deal of pride in what members of the family had accomplished. In many cases, because students were the "first" in various areas of achievement (finishing high school, attending college), they felt honored to serve as role models for younger siblings or cousins.

The following statements provide examples of the strong bond existing in these families:

I will be the first person on my mother's side of the family to attend college; therefore, my cousins look up to me as a role model. This responsibility has helped me to continue working hard to excel. (S)

My sister now realizes she's kind of dumb for doing that [attending a small community college] because she's smart and could have gone to a better college. My sister and my cousin keep pushing me to do better. I want to make them proud of me. (S)

And I'm the first one going to college because my older cousins didn't go to college. So it's always been, "Carmen can do it!" And my mother says I'm living what she wanted to be. She's living through me. (S)

The Spanish fathers should show their children the island over there. We've been there a couple of times. But some families just forget it. They don't want to go there for nothing. (P)

Be proud of your culture. Always stand up for it. (S)

I think there is a lot of ignorance. There are so many Puerto Ricans and it's going to continue to grow. I think the schools should teach the other children about Puerto Rico so maybe they will have more understanding and they'll be able to see it in a different light. Some of them don't know what it is. They don't know it is part of this country! (P)

You share a lot in Spanish families. Things like family comes first. Don't forget who you are, where you're from. I think that's true in almost any minority. The fact that you are a minority and you have to let the world know that we can do just as much as you can. So you have to stress that. Well I'm doing this and I'm a Puerto Rican... you have to prove that you're just as good as the other kids. (S)

Factor 6: Optimistic Outlook/ Lack of Defeatism

Parents and students in the present study held a common belief that the future could be better with preparation and hard work, and they were willing to deal with challenges and obstacles they met along the way. The following accounts provide examples of this optimistic outlook:

Just the other day I was hearing the conversation of a few Puerto Rican friends that were complaining of their grades. They were saying: "Why do we come here if we know that we can't handle it? To make fast food we don't need a high school diploma!" That might be very well true, but with no good education, they won't move farther than the corner. I want my life to be a good one, with a very good job; not all my life behind a kitchen. (S)

You know I'm on welfare. They tell me I can go to work or to study. They were going to send me to school in January and I was going to take "chiropractic assistant." Paid by them and everything. But they got no funds. They call me and that's that. I want to study something because I know I could do it. Even though I'm going to be 40 in a couple of years, I know I could do it. (P)

She [daughter] knows that we will make a strong effort to help her do what she wants to do. Back home it didn't matter if you were smart or motivated, or whatever, but the economic situation was so bad. And, in my case, my mother wanted me to go to college but I didn't. I never wanted to go. I knew they weren't able to come up with the support so I just wanted to go and start working right away. I think I wasted my talents because I didn't go to college. And now, she has the chance for it. That's why we tell her to keep going. (P)

My parents being from such a bad background, a deprived background, I have learned to take advantage of the opportunities. There is a lot out there for Puerto Rican and minority students. There's so much out there. But they don't see it. They have to be motivated. They have to have

ambitions. Aspirations to do something better with their life. (S)

Do your best and don't allow anyone to put limitations on you. You set your own limitations and you can't blame anyone. Because if you want to do it, you can do it. I think that's what you have to tell your kids. (P)

My mother always taught us that if you work hard you can accomplish your goals. (S)

Factor 7: Discomfort with Cultural Stereotypes/ Reaction to Teacher and Community Expectations

Families of high achievers said that biases and negative stereotypes held by teachers and others in the community can actually become a motivating factor. The following sample passages from parents and students describe how families in this study reacted to stereotypical attitudes:

The fact that we moved to Connecticut [from Puerto Rico] made me realize that I had to work harder so people would understand that not all people from Puerto Rico were on welfare or from the poorer classes. (S)

I am the only Puerto Rican who took four years of honors English. Now I am in the AP class. Sometimes I found it very hard and I felt I had to work even harder than the other students to prove that I could do it. But I want to do well in school because it gives me confidence and pride in what I accomplish. (S)

I want to do well to prove that simply because I am a minority that does not mean I cannot excel. (S)

We always tell them [our children] that people from other nationalities, like Italian, are basically successful. An Puerto Rican, you don't see too many going to college. We tell her [daughter in study], you should try to make a difference. Try to change that. You are one of our people that is going to be different. A lot of people from our country don't care about trying to get to the top. They just go on. Maybe she could be a role model for other kids if she tries hard. (P)

Adults around have a lot of biases. Teachers, also. But I've learned to live with it and it just makes me work harder. (S) I hear the kids saying, "Well, you know my family is a welfare family and it's expected that I will become a welfare recipient so why bother? Why come to school?" And I think they hear it too often. It should not be that way. I do not agree with it at all. I feel the opposite. If someone expects you to fail, well, then you're going to prove them wrong. That's the way I am. So it's too bad that a lot of students feel that way. (P)

The vision that everyone has in this world is that all Puerto Ricans are dropouts. And it's like an honor to go through school and go to college. . . if you try hard enough, you *will* succeed. (S)

Factor 8: School and Extracurricular Involvement/ "Social Bonding"

All of the high achieving students in this study were actively involved in both school and extracurricular activities, and their parents encouraged and supported this involvement. Being "involved" helped them to develop a positive self-image and a sense of commitment to school and community. All of the students

played at least one team sport, belonged to school clubs and organizations such as Student Council, Yearbook Committee, Italian Club, Drama Club, Psychology Club, Future Teachers of America, Upward Bound, or Literary Societies. Four served as class officers and all have received honors or awards for their outstanding service or participation. One student probably summed it up best when she suggested that all Puerto Rican students should get involved in their school and their community if they want to feel good about themselves and their abilities. She advised:

Go out and do things for other people. It helps you communicate with the community itself. With the Student Senate, I became president. My sister was president, also. That shows your leadership. Encourage them to reach out for those things. I reached out and I was secretary of my class for three years. Those things have helped me a lot. They've given me self-confidence. The first time I ran for something, it was like, "There's no way I'm going to get this." But when I got it, I worked hard. And doing other clubs, other organizations. It's diversity. It's a variety. Not just one thing. I helped found the "Students Against Drunk Driving." And getting involved has helped me a lot. And it also helped me to be proud of being a Puerto Rican. Being able to say, "Yes, I'm Puerto Rican. And I'm here helping my community!"

The preceding eight factors appeared to have a significant effect on academic achievement for all ten subjects. In addition, variant themes were identified for one or more subjects. Because these unique factors may have had an important effect on individual student's achievement, they are discussed in the next section.

Variant Themes

Variant 1: Role Models Outside the Family

Several participants in this study described a person outside the immediate or extended family who had a strong influence on their outstanding achievement. Although "Juan" said his mother played the "biggest role" in his achievement, he also talked about the influence of his guidance counselor and his best friend.

Juan wrote, "My guidance counselor gave me help when I most needed it." Juan later explained that whenever he had a difficult decision to make, he would go back and forth between his mother and guidance counselor (Mrs. J.) and they would help him weigh the alternatives. Mrs. J. also had great confidence in Juan's abilities. She "kicked" him out of the bilingual program and kept encouraging him as he moved up to the college preparatory and honors classes. Like Juan, Mrs. J. was a Puerto Rican American who had come from a very large and poor family; she, too, had found success through hard work and determination and was happy to nurture Juan along this path.

Juan described his classmate, "Alden", as his "best friend" who was always there to offer "support and friendship." Alden helped Juan gain self-confidence by convincing him to keep pushing towards higher goals. When Juan worried about moving up to honors level classes, Alden advised, "You want something that is hard to get, don't give up. Just go for it!" The fact that Alden is a white, middle-class American may have helped Juan understand and feel a part of the larger culture. This was a reciprocal relationship because Alden loved to "hang around" at Juan's apartment enjoying the family's Spanish cooking and music.

For "Elena," a high school guidance counselor was also a special friend and confidant. While going through the difficult process of her parents' divorce, Elena always had the counselor to turn to for advice and encouragement.

It is significant to note that, in general, school guidance counselors were a strong source of support for the subjects in the present study. Nine of the ten students involved were nominated by their counselors. When the researcher visited the schools, the counselors talked with pride about the students and displayed a great deal of concern for the students' future welfare.

"Cynthia" gave a lot of credit for her early outstanding achievement to her elderly Polish neighbor. When she was in elementary school, Cynthia often studied at this lady's home. Because Cynthia's mother did not speak English that well, it was this special neighbor who really taught Cynthia to speak proper English. She also helped her with difficult assignments and offered support and encouragement. Cynthia spoke with great affection when she said, "She was *always* there for me!"

Variant 2: Outstanding Teachers

"Roberto" named several outstanding teachers who had made their subject matter particularly interesting and relevant to the students, and really seemed to care about each individual student's growth. For example, his science teacher felt Roberto was one of the brightest students she had ever had. As a result of her enthusiasm and outstanding presentation of the topic, she sparked Roberto's interest in science and helped him become aware of his capabilities in this area. Because of her influence, Roberto was considering advanced studies and possibly a career in the sciences. "Marcos" and "Maria" also mentioned teachers who had taken a special interest in their students or made the subject interesting and challenging.

Variant 3: Consistently High Teacher Expectations

"Carmen" was a very precocious child who was already reading when she entered school. Because she always functioned above her peers in academics, Carmen felt her teachers expected outstanding performance and she enjoyed the challenge and praise she received by living up to these expectations.

Variant 4: Intrinsic Drive to Succeed

Finally, it is important to point out that three of these high achieving students had siblings who were *not* doing well academically. One parent blamed her sons' under achievement on her divorce, another set of parents felt they hadn't pushed the importance of a good education enough with their oldest child, and one student called her brothers "lazy." Whatever the cause, the fact is that these siblings were growing up in the same loving and supportive families yet failed to achieve to their capacity.

Furthermore, some very successful students grow up in troubled or dysfunctional families. Although all ten students in the present study came from what Marjoribanks would call "ideal-type" families, one student spoke about a close friend who was "making it" *despite* his family background:

I have a friend of mine. He is the purest, most innocent kid I have ever known. And his father is an alcoholic. His home life is so terrible. And it's really sad. But he hasn't been defeated by it. The thing is that he is determined *not* to be like his father. He is determined to treat everyone well, as he would like to be treated. He's working hard and he is one of the best students. Every admires him.

For this young man, a strong inner drive to succeed and the support of caring teachers and peers has made success possible in spite of a difficult home environment.

According to "Juan's" guidance counselor, Mrs. J., students must possess "something special that comes from inside" in order to be successful. She further described this characteristic as, "that drive to achieve. A special feeling that comes from achieving." Mrs. J. believed that both she and Juan possessed this inner drive which helped them to overcome poverty and other obstacles. This intrinsic drive to succeed may also have made the critical difference between higher and lower achieving members of the same supportive families.

Conclusions

The results of this study indicate that high academic achievement among Puerto Rican high school students can be attributed to eight factors. Five of the factors, including "press for achievement," "high educational and occupational aspirations", "strong family support system", "optimistic outlook/lack of defeatism", and "school and extracurricular involvement/ "social bonding," seem to be generalizable across racial, ethnic, and social groups as factors supporting high academic achievement (Clark, 1983; Marjoribanks, 1979; Soto, 1988; Walberg, 1984; Watt, 1987). A sixth factor, "press for language development," was modified by the researcher from the factor Marjoribanks labeled "Press for English." The results of the present study indicated that it is not the medium (English or Spanish) but the quality of family interaction (frequent reading and discussion of topics being read by others in the family, concern for the correct usage of the language, etc.) that had a significant effect on achievement.

Two factors, "family bond" and "discomfort with cultural stereotypes/ reaction to teacher and community expectations," seem to be unique to the Puerto Rican subgroup. The Puerto Rican culture is committed to maintaining a strong linguistic, family-centered identity. Family pride and loyalty are fundamental values which lead to more "supportive" and less "competitive" behaviors. In the present study, strong family bonds and a family-centered drive to build a better future were factors that supported and nourished the students' high achievement. For some of the subjects, the desire to stay close to home and family did limit student choices when applying to college.

Unfortunately, there is a lack of understanding about the value Puerto Ricans place on education because the cultural group, in general, is judged by those highly visible members who are discouraged or who have given up and are not achieving in school or the workplace. The most significant and fundamental finding arising from the present data is that Puerto Rican parents of gifted students *highly value* educational achievement and further believe that ability, persistence, and hard work are the means of acquiring a good education. Negative teacher and community attitudes had to be addressed and overcome as these highly motivated parents and students sought to prove they were capable of outstanding achievement.

In addition, four variant factors were described by individuals as having an important effect on academic achievement. Those factors were: (1) role models outside of the family; (2) outstanding teachers; (3) consistently high teacher expectations; and (4) an intrinsic drive to succeed.

Finally, while the purpose of this study was to identify common factors in the family learning environments of gifted Puerto Rican high school students which support high achievement, the scope of the present paper does not allow the researcher to fully explore the range and depth of information gathered in this qualitative study or to discuss other peripheral issues arising from the questionnaire and interview data.

Implications

It is the nature of man to rise to greatness if greatness is expected of him (John Steinbeck).

Hispanic Americans, the fastest growing student population in the United States today, may be the most undereducated group in America. If we are to help Puerto Rican children reach their academic potential and ensure them equal access to gifted programming, certain fundamental issues must be addressed by educators, parents, and society in general.

First, educators must be made aware of the high value the Puerto Rican culture places on education and they must understand that Puerto Rican children are just as capable as any other subgroup of attaining high levels of academic achievement. Students can and will "rise to greatness if greatness is expected of [them]."

Puerto Rican parents must impart to their children the uniqueness of the individual. Children must understand that they have something valuable to contribute to our society, and parents can serve as role models and facilitators for their children. Specific suggestions for parents based on this study and the sample of high achieving students are: (1) Puerto Rican parents should be urged to help their children become "biethnic" by celebrating and maintaining their own rich language and culture as they begin to appreciate and assimilate the larger culture they have selected; (2) parents should know that by encouraging their children to develop language skills from an early age in either Spanish or English they can aid in their child's intellectual development; (3) parents should be made aware that they can help their children be successful in school by showing interest in topics their children are studying, monitoring time spent on homework, praising children for their efforts and helping them deal with failures met along the way, and letting teachers know they will offer support at home for activities occurring in the classroom if they are given the proper guidance; (4) parents should be encouraged to get involved in their children's school and extra-curricular activities and join in developing a "social bond" which will allow their children to grow in competence and self-esteem; and (5) most significantly, parents must let their children know that they have confidence and faith in their abilities. By establishing a "sponsored independence" style of parenting (see Clark, 1983), guidelines and rules for responsible behavior should be established while allowing greater freedoms and responsibilities as the children grow in academic and social competence.

Parents and school personnel must be brought together on a common ground of understanding. The Comer model (1988) can, for example, be used to establish more community-based programs. We must look to both the school and the home to open lines of communication. We must help teachers understand and value the contributions and assistance the Puerto Rican community can bring to the school, and help parents become confident that their children can be successful in the school environment with the nurture and support of the home.

Colleges and universities must become more sensitive to family and cultural issues as they seek to recruit Puerto Rican students. In this study, family-centered identity did limit some of the students' educational options. Two students chose to attend local, less prestigious colleges so they could stay close to home and family. College officials should actively involve the family as a unit in the decision-making process regarding higher education. The family must understand the opportunities available and feel comfortable with and encourage the child's decision to leave home in pursuit of a quality education.

Gender and counseling issues should also be addressed by educators as students explore career alternatives. In the present study, students mentioned possible careers in medicine, mathematics, accounting, biology, politics, engineering, and teaching. Students might be able to prepare more realistically for these career choices if they are provided with the proper guidance and support during their educational training. It would

also be important to explore whether students are following traditional career paths (i.e., two females who chose teaching) or if they are being made aware of expanding opportunities available to both men and women.

Because Puerto Rican students generally perform poorly on standardized testing, educators must seek alternative methods to identify students for gifted programming. Outstanding classroom performance, evidence of strong critical and creative thinking skills in classroom discussions and assignments, unusual and sustained interest in topics, and outstanding individual projects are other possible ways of assessing strengths in academically talented students.

Finally, society in general must gain a greater awareness and understanding of this unique cultural group within our population. Puerto Ricans are American citizens who, because of the way history evolved, have a different language and cultural identity. While linguistically different immigrants of past generations were quickly assimilated into the white, English-speaking culture, whether they liked it or not, today we live in a different world and our survival will depend on cultural awareness and global interdependence. By teaching our children appreciation and awareness first at home, we can strive towards a global community that accepts and appreciates the contributions of each human being.

Recommendations for Further Research

The results of this study suggest that, through greater awareness by both educators and parents, Puerto Rican children may be able to experience greater academic success.

Future investigations might be done with Puerto Rican elementary age children and their parents to find out which factors support the achievement of younger students.

A general study involving Puerto Rican parents of kindergartners or first graders may reveal whether some parents' expectations are lower from the start and promote a "self-fulfilling prophecy" or if parents and children become defeated over the years as a result of lowered teacher expectations and community biases.

Early intervention programs which bring parents and educators together, as discussed earlier in the Comer model, should be implemented and assessed to find out if Puerto Rican students will experience greater academic success when the school and home meet on a common ground to help children work towards their potential. Continued involvement of teams of parents and educators as the children progress through school should also be encouraged and assessed.

A longitudinal study of academically successful Puerto Rican high school students could determine which educational and occupational goals had been reached. This information might help educators understand when or where the educational system succeeds or fails in preparing Puerto Rican students for future career choices.

A study of higher and lower achieving Puerto Rican high school students might look further at the "defeatist" issue. It is important to know if the majority of underachieving Puerto Rican students believe that, no matter what their ability or how hard they try, there is little hope of a better future. An important implication of the present study may be that pride and confidence in one's own abilities, and a belief in control over one's future destiny, may play a fundamental role in the eventual success of Puerto Rican students.

Table 1
Demographic Information: Students

Student Number	Sex	Age	Grade	Birthplace	Time Spent on Mainland	
1	M	17	12	Puerto Rico	18 months	
2	F	17	12	Mainland	17 years	
3	F	15	10	Puerto Rico	12 years	
4	F	17	12	Mainland	17 years	
5	M	16	11	Puerto Rico	4 years	
6	F	16	11	Mainland	16 years	
7	M	18	12	Puerto Rico	17 years	
8	M	16	9	Mainland	16 years	
9	M	16	10	Puerto Rico	13 years	
10	F	17	12	Mainland 17 years		

Table 2
Demographic Information: Families

Student Number	ears on ainland*	Education Attained		Occupation		
	Father	Mother	Father	Mother	Father	Mother
1*	0	12	Gr. 12	Gr. 12	Bank Teller	Housewife
2*	31	31	Gr. 12	Gr. 12	Fireman	Secretary
3	12	12	Gr. 12	Gr. 12	Machinist	Electronic Assembly
4	44	44	Gr. 9	Gr. 6	Machine Operator	Housewife
5	20+	4	M.A.	Assoc. Degree	Teacher	Marketing
6*	27	27	Gr. 10	Gr. 9	Construc- tion	Housewife
7	17+	17	M.A.	Gr. 12	Teacher	Secretary
8	20	20	Gr. 12	Gr. 12	Foreman	Daycare
9	13	13	M.A.	Gr. 12	Guidance Counselor	Housewife
10	17	7	Assoc. Degree	G.E.D.	Civil Engineer	Collection Specialist

NOTE: All of the parents were born in Puerto Rico. * Parents of this student are now divorced.

References

Albert, R. S. and Runco, M. A. (1986). The achievement of eminence: A model based on a longitudinal study of exceptionally gifted boys and their families. In R. J. Sternberg and J. E. Davidson (Eds.), *Conceptions of Giftedness*. Cambridge: Cambridge University Press.

Armor, D. J. (1972). School and family effects on black and white achievement: A reexamination of the U.S.O.E. Data. In F. Mosteller and D. P. Moynihan (Eds.), *On equality of educational opportunity*. New York: Random House.

Ascher, C. (1984). *Helping Hispanic students to complete high school and enter college*. ERIC/CUE Digest, Number 20. New York: ERIC Clearinghouse on Urban Education.

Bogden, R. C. and Biklen, S. K. (1982). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon, Inc.

Bradley, R. and Caldwell, B. (1984). 174 Children: A study of the relationship between home environment and cognitive development during the first five years. In A. Gottfried (Ed.), *Home environment and early cognitive development: Longitudinal research*. San Francisco: Academic Press.

Clark, R. (1983). Family life and school achievement. Chicago: University of Chicago Press.

Coleman, J. S. (1975). What is meant by "an equal educational opportunity?" *Oxford Review of Education*, 1, 27-29.

Coleman, J. S. (1990). Equality and achievement in education. Boulder, Colorado: Westview Press.

Comer, J. P. (1988). Educating poor minority children. Scientific American. Nov., 42-48.

Davis, C.; Haub, C.; and Willette, J. (1983). U.S. Hispanics: Changing the face of America. *Population Reference Bureau*, *Inc.*, 38 (3).

Diaz, W. (1984). Hispanics: Challenges and opportunities. Report No. 435. New York: Ford Foundation.

Fernandez, R. M., and Nielsen, F. (1986). Bilingualism and Hispanic scholastic achievement: Some baseline results. *Social Science Research*, 15 1): 43-70.

Goldenberg, C. N. (1987). Low-income Hispanic parents contributions to their first-grade children's word recognition skills. *Anthropology and Education Quarterly*, *18* (3): 149-179.

Guba, E. G. (1978). *Toward a methodology of naturalistic inquiry in educational evaluation*. Los Angeles: University of California Press.

Halsey, A. H. (1972). Educational priority. E.P.A. Problems and Policies, 1: 9-23.

Hodgkinson, H. L. (1985). *All one system: Demographics of education kindergarten through graduate school*. Washington, D.C.: Institute for Educational Leadership, Inc.

Hyland, C. R. (1989). What we know about the fastest growing minority population: Hispanic Americans. *Educational Horizons*, 67 (4): 131-35.

Karabel, J., and Halsey, A. H. (1977). *Power and ideology in education*. New York: Oxford University Press.

Laosa, L. M. (1982). School, occupation, culture, and family: The impact of parental schooling on the parent-child relationship. *Journal of Educational Psychology*, 74 (6): 791-827.

Lincoln, Y. S. and Guba, E. S. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage Publications, Inc.

Marjoribanks, K. (1987). Ability and attitude correlates of academic achievement: Family group differences. *Journal of Educational Psychology*, 79 (2): 171-8.

Marjoribanks, K. (1979). Ethnic families and children's achievement. Sydney: George Allen and Unwin.

Martinez, M. A. (1985). Toward a bilingual school psychology model. *Educational Psychologist*, 20 (3): 143-52.

Midwinter, E. (1977). Education for sale. London: George Allen and Unwin.

Nine-Curt, C. J. (1990). The commonwealth status for Puerto Rico. Unpublished letter to the members of the Congress of the United States of America.

Smith, M. S. (1972). Equality of educational opportunity: The basic findings reconsidered. In F. Mosteller and D. P. Moynihan (Eds.), *On equality of educational opportunity*, New York: Random House.

Soto, L. D. (1988). The home environment of higher and lower achieving Puerto Rican children. *Hispanic Journal of Behavioral Sciences*, 10 (2): 161-7.

Soto, L. D. (1986). The relationship between the home environment and intrinsic versus extrinsic orientation of fifth and sixth grade Puerto Rican children. Unpublished doctoral thesis, Pennsylvania State University.

Walberg, H. J. (1984). Families as partners in educational productivity. *Phi Delta Kappan*, February: 397-400.

Watt, N. F. (1987). A psychological study of educational attainment among Hispanics. A Center for Education Statistics Issue Paper. Colorado: Denver University.